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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/712,880  
Filing Date: November 13, 2003  
Appellant(s): HSU ET AL.

**MAILED**

**NOV 26 2007**

**GROUP 3600**

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Wing Y. Mok  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed September 11, 2006, appealing from the Office action mailed April 7, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is incomplete. A correct statement of the status of the claims is as follows:

This appeal involves claims 1-2, 4-12, 14-20, and 22-34. Claims 3, 13, and 21 have been canceled.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims

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involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because in general the explanation of the subject matter defined in the claims does not accurately refer to the page and line numbers in the specification that adequately explain the claimed subject matter. That is, the examiner in large part disagrees with the mapping of the claim elements to the specification. The examiner however believes that the claim elements are understandable on their own to a person of ordinary skill in the art. With regard to the means plus function elements of claim 26, the summary of claimed subject matter contained in the brief is correct.

#### **(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,799,156	Shavit	1-1989
2002/0161672	Banks	10-2002
2002/0029171	Senior	3-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2,4-12,14-20, and 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shavit (Paper #051109; US Patent No. 4,799,156) in view of Banks (US Pub. No. 2002/0161672).**

Shavit teaches an interactive electronic communication and processing system for business transactions between buyers and sellers, accessed using terminals, and storing information in databases (see at least Abstract, Figs. 1,2,13,14; column 2 lines 9-15, column 5 lines 39-65). Shavit further teaches:

- receiving a quotation including at least a first product and its quote amount:  
quotation entry device, storing the quote amount, memory connected to the data entry device (see at least column 11 line 52 – column 12 line 18, column 16 line 50 - column 17 line 2, column 33 line 28 – column 34 line 2, column 40 lines 27 - 35); receiving the order that identifies at least the first product and desired quantity, an order entry device (see at least column 13 line 51 – column 14 line 9); quotation entry device and the order entry device comprise a single device (see at least Abstract, column 5 lines 16-65, column 13 line 51 – column 14 line 9. Please note: as described in Shavit, virtually every function performed can be performed by the same device); calculating an order price associated with the first product by accessing the stored quote amount, and determining the order price based on the quote amount and the desired quantity, price calculator configured to receive order from order entry device, access memory, identify quote amount, and calculate price based on quantity and quote amount (see at least column 13 line 10 – column 14 line 9, column 25 lines 28 – 50).
- the product manufacturing facility is a semiconductor foundry: (Please note: The nature of the facility and its particular industry is descriptive material and is not functionally involved in the recited steps of the method. Because it has no functional role in the method it is non-functional descriptive material. This descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106).

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- quote amount is stored in a quotation database: connected to the order entry device (see at least column 12 line 54 – column 13 line 34, column 25 lines 28 – 50, column 29 line 31 – column 30 line 2, column 33 line 28 – column 34 line 2, column 36 lines 22 – 53, column 39 lines 1-4, column 40 lines 5-17).
- storing predetermined information associated with the first product in a product database: (see at least column 2 lines 9-15, column 7 lines 6-22, column 25 line 51 – column 26 line 4, column 40 lines 28-35); updating a mapping database with predetermined information from the quotation database and the product database associated with the first product (see at least column 24 line 53 – column 25 line 9, column 31 line 32 – column 32 line 9, column 36 lines 22-53, column 40 lines 28-35); determining the order price based on the quote amount from the mapping database associated with the first product and the quantity identified in the product manufacturing facility order, mapping database is updated automatically when new quotation is entered into quotation database, when the product database is changed (see at least column 24 line 53 – column 25 line 9, column 31 line 32 – column 32 line 9, column 36 lines 22-53, column 40 lines 28-35. Please note: utilizing database triggers or auto-call functions is inherent in automatic database updating).
- receiving a quote amount for a second product: storing the quote amount (see at least column 11 line 52 – column 12 line 18, column 16 line 50 - column 17 line 2, column 33 line 28 – column 34 line 2, column 40 lines 27 - 35); calculating order price associated with the second product, wherein the received order

identifies at least the first product and the second product and desired respective quantities, by accessing the stored quote amount associated with the second product, and determining the order price for the second product based on the stored quote amount associated with the second product and the desired quantity identified in the product manufacturing facility order, wherein the quote amount associated with the first product and the quote amount associated with the second product are in the same quotation (see at least column 12 line 54 – column 14 line 9, column 25 lines 28 – 50, column 29 line 31 – column 30 line 2, column 33 line 28 – column 34 line 2, column 36 lines 22 – 53, column 39 lines 1-4, column 40 lines 5-17).

Shavit teaches all of the above as noted under the 103(a) rejection and teaches a) updating a database record with information from quotation and product databases, b) associating information from various databases together in facilitation of a transaction, c) retrieving records relevant to a transaction, and d) calculating costs of an order based on product, quantity, and quote amount. Shavit, however, does not disclose:

- updating a mapping database record associated with the first product: with predetermined information from the other databases associated with the product wherein the mapping database associates information from one database with information from another database.



- retrieving a mapping database record associated with the product from the mapping database; and
- calculating an order price based on the mapping database record:
- order created using graphical user interface:

Banks teaches a system supporting commercial transactions that synchronizes product data from various sources into an enterprise resource planning system and teaches a) maintaining product information in databases, b) product information including product descriptions and pricing information, c) updating product information in databases upon receipt of new information, and d) using compiled quantity, price, and product information to calculate order pricing. Banks further teaches:

- updating a mapping database record associated with the first product: with predetermined information from the other databases associated with the product wherein the mapping database associates information from one database with information from another database (see at least abstract, figs.1,3; page 1 para.0012; page 2 para.0016, 0019 – page 3 para.0020, 0022; page 5 para.0032).
- retrieving a mapping database record associated with the product from the mapping database: (see at least abstract; page 1 para.0012; page 2 para.0019 – page 3 para.0020,0022).
- calculating an order price based on the mapping database record: (see at least figs.1,3,5; page 1 para.0012; page 2 para.0018).
- order created using graphical user interface: (see at least page 2 para.0018).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Shavit to update a mapping database record associated with the first product with predetermined information from the other databases associated with the product, retrieve a mapping database record associated with the product from the mapping database, calculate an order price based on the mapping database record, and create an order using a graphical user interface, as taught by Banks, in order to improve the responsiveness of the system to purchasers and thereby increase commerce using the method.

*Pertaining to computer readable medium and system Claims 19-20 and 22-31*

Rejection of Claims 19-20 and 22-31 is based on the same rationale as noted above.

**Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shavit (Paper #051109; US Patent No. 4,799,156) and Banks (US Pub. No. 2002/0161672) as applied to claims 1-2,4-12,14-20, and 22-31 above, and further in view of Senior (Paper #051109; US Pub. No. 2002/0029171).**

Shavit and Banks teach all of the above as noted under the 103(a) rejection and teach a) using remote terminals for inputting quotes and orders, b) using a single device for performing multiple functions such as inputting both quotes and orders, c) using multiple locations for storing databases containing product information, orders and quotations, and further teach accessing various databases, placing orders, and communicating quotations from remote locations via the internet. Shavit and Banks,

however, do not disclose the single device being a personal data assistant, the quotation entry device connected to the memory via a wireless connection, or the order entry device connected to the price calculator via a wireless connection. Senior teaches the single device being a personal data assistant, the quotation entry device connected to the memory via a wireless connection, and the order entry device connected to the price calculator via a wireless connection (see at least page 4 para.0063). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shavit and Banks to include the single device being a personal data assistant, the quotation entry device being connected to the memory via a wireless connection, and the order entry device being connected to the price calculator via a wireless connection as taught by Senior, in order to improve the convenience of using of the system, make the system more accessible, and make the system easier to use, thereby attracting more users to the system and increasing commerce using the system.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wilmsen, US Patent No. 6,578,030 (June 10, 2003); Teaches combining multiple catalogs by determining characteristics and values related to the items therein and mapping the characteristic values and items to form a new combined catalog (mapping database).

**(10) Response to Argument**

Appellants claim that the references do not teach or suggest all the claim limitations and argue that a *prima facie* case of obviousness has not been established because “the prior art reference (or references when combined) must teach or suggest all the claim limitations.” It is here noted that there are a wide range of bases for a determination of obviousness and that the overly rigid application of the teaching-suggestion-motivation (TSM) test is improper. See *KSR International Co. v. Teleflex Inc. (KSR)*, 550 U.S. at \_\_\_, 82 USPQ2d 1385 at 1391 (2007).

Notwithstanding the above, it appears from appellants' piecemeal analysis of the references that appellants are arguing that a *prima facie* case of obviousness does not exist because each reference on its own does not possess every claim limitation. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In addition, appellants' arguments misstate elements disclosed or not disclosed by respective references. For example, appellants argue that “Banks' catalog database does not include quotation information from a quotation database and predetermined information from a product database...” (Appeal Brief page 13 lines 4-5). First, it should be noted that the rejection cites Shavit for the prior art disclosure of these elements. It should also be noted however that later in the same paragraph of the brief, appellants acknowledge that Banks discloses “a catalog database for maintaining product

information including product description, product vendor, and associated pricing information.” (Appeal Brief page 13 lines 7-8, citing Banks Abstract). This certainly qualifies as “predetermined information from a product database,” however, Banks also discloses “a first database for maintaining product information including product description, product vendor and associated pricing information.” (Banks Abstract). In the abstract alone therefore Banks discloses at least two databases with predetermined product information and associated pricing information. Associated pricing information comprises the amount quoted as a price and is therefore quotation information.

Thus not only have appellants argued that elements are not present in Banks even though Banks is not relied upon for their disclosure, but the argument is still incorrect because the elements are also present in Banks. In addition to clearly exemplifying the extensive similarity between the prior art and the present invention, this also demonstrates sufficient similarity between the inventions of Banks and Shavit that it would have been obvious to one of ordinary skill in the art to apply the mapping database of Banks for use with the system of Shavit to improve the system of Shavit in a way that would have been entirely predictable.

The discussion of the Banks disclosure in appellants’ brief, even if taken directly from the brief and assumed correct, alone provides sufficient disclosure of the use of data mapping tables (i.e., a mapping database) to reconcile prices and other bits of product information, to support an obviousness rejection when combined with Shavit. For example, at page 12 of the brief appellants acknowledge that Banks discloses, “...System 31 synchronizes price, vendor, product and other information between the

unit 13 and 17 databases once a Catalog file from the e-Catalog unit 13 is received and loaded into a set of cross reference (data mapping) tables in the unit 17 database. This synchronization is achieved by matching information items received from unit 13 with corresponding items in unit 17 using the mapping tables and replacing matched items with updated information.” (Citing Banks paragraph 0019). A table of data is the same as a database, therefore a data mapping table is a mapping database and the records in the table are mapping database records. The product data is loaded into and retrieved from cross reference (data mapping) tables and information items are synchronized by matching information from each unit database using the mapping tables. The matched items are replaced with updated information.

While discussing the Banks reference in detail in an effort to show that it does not possess elements that the rejection actually relies upon Shavit to disclose, appellants' brief neglects to address Shavit, the primary reference. The only mentions of the Shavit reference appear in conclusory statements, suggesting that because appellants do not believe certain elements are present in Banks, that they are not in Shavit either. Appellants' arguments therefore fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference that is cited for their disclosure.

The quote amount from quotation database, quantity from product manufacturing facility order, and calculating of order price based on desired quantity identified in product manufacturing facility order are elements found in Shavit. Shavit includes all of

the elements necessary to practice the method except the mapping database. Perhaps the mapping database was not in common use at the time of the invention of Shavit. It is just as likely that the term "mapping database" had simply not yet become the term of art used to describe a database that cross references similar data from a plurality of databases and reconciles or synchronizes the information. In any case, it would have been obvious to a person of ordinary skill in the art of product marketing and inventory management automation to adopt new technologies as they become available, and therefore to have included the mapping database of Banks in the market management system of Shavit in order to improve the function of the invention of Shavit in a way that would have been entirely predictable to one of ordinary skill in the art.

As indicated by appellant, independent claims 1 and 19 share similar features, and claims 2,4-10,20 and 22-25 depend therefrom. These claims all stand or fall based on the above arguments with regard to the independent claims. Although appellant argues claim 11 separately it is noted that the disputed elements, those concerning the addition of the mapping database to the prior art system, are the same. Claim 11 describes performing the same method as in the previously discussed independent claims with two products rather than only a first product. The steps describing performance of the method with two products, a first product and a second product, were treated in the rejection of dependent claims 9-10, depending from claim 1. These elements are present in all of the references, though the rejections rely upon Shavit and have not been disputed. Claims 12 and 14-18 depend from claim 11 and appellants rely upon the discussion of claim 11 to advance those claims. Because the disputed

elements in claim 11 are the same as those discussed above, the examiner relies on the above discussion with respect to claim 11.

With regard to claim 26, also separately argued, the essential argument is again the same as above with regard to the mapping database. The approach is also the same concerning other elements addressed for the first time, inasmuch as the appellants argue that features are not present in Banks when it is actually Shavit that was relied upon to disclose those features in the rejection, these arguments accompanied by conclusory statements that the elements are not present in either Shavit or Banks. For example, "a mapping database that interfaces with both the quotation database and the product database" is discussed above with the exception that the word "interface" is used to indicate that the mapping database is connected with the other databases and communicates with them. The updating of information from the other databases to the mapping database and the retrieval of information from the mapping database are all examples of the databases interfacing with each other. Appellants argue, again without regard to Shavit or the discussion of obviousness in the 103 rejection, that Banks fails to "disclose or suggest a price calculator configured to access the memory to identify the quote amount associated with the first ordered product from the mapping database record." Shavit discloses "a price calculator configured to access the memory to identify the quote amount associated with the first ordered product," as discussed in the above rejection, and "calculating an order price based on the mapping database record" is disclosed in Banks, also as discussed in the rejection. It would have been obvious to one of ordinary skill in the art that using



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Shavit's "price calculator configured to access the memory to identify the quote amount associated with the first ordered product" to calculate "an order price based on the mapping database record" disclosed in Banks, would have yielded predictable results and resulted in an improved system.

Claims 32-34 depend from claim 26 and appellants' arguments with regard to those claims rely on previous arguments pertaining to claims 1,2,4-12,14-20, and 22-31. Appellants argue that the Senior reference does not provide the elements that appellants have previously argued are missing from the references. The elements at issue are in fact present in the previously discussed references and it is therefore unnecessary to address this argument. Senior is relied upon in the rejection for other features that are not in dispute.

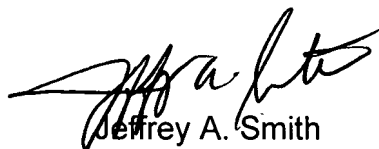
For all of the reasons noted above the examiner respectfully requests that the Board affirm the 35 USC §103(a) rejection.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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